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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,302	01/09/2004	Keith Alan Moriarty	19.0321	8313
7590	11/04/2005			
Tim W. Curington Stonehouse Technology Centre Brunel Way Stroudwater Business Park Stonehouse, Gloucestershire, GL 103SX UNITED KINGDOM			EXAMINER NEUDER, WILLIAM P	
			ART UNIT	PAPER NUMBER
			3672	
DATE MAILED: 11/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/754,302

Applicant(s)

MORIARTY, KEITH ALAN

Examiner

William P. Neuder

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/9/04, 1/23/04</u> .   | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statement filed 1/23/04 lists only the same 9 foreign references listed on the IDS of 1/9/04. Since these foreign references were considered with the IDS of 1/9/04, they have been lined through on the IDS of 1/23/04.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-9,11-14,19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al 6,877,570.

Chen discloses an apparatus to install a casing string 12 into a borehole while the borehole is being drilled. The casing string having an internal and an external diameter. A casing latch 52 is installed at the distal end of the casing string. The latch has a pass-through diameter smaller than the casing internal diameter and is releasable connected to a vertical drilling assembly 14. The vertical drilling assembly includes a mud motor 14, a first cutter device 18 and a second cutter device 16. The mud motor rotates the bit 18 in a direction opposite the rotation of the casing string. Cutter device 16 rotates with rotation of the casing. The vertical drilling assembly is retrieved through

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the pass-through diameter of the casing latch. As to claim 8, second cutter device 16 drills the borehole at gauge diameter, the gauge diameter being larger than the outside diameter of the casing string. As to claim 9, the cutter 16 is an underreamer. As to claims 11 and 12, the mud motor is a positive displacement turbine driven motor. As to claims 13 and 14, a MWD tool 40 is provided. As to claim 19, bit 18 is a standard bit. As to claim 20, cutter 16 is located on a peripheral surface of the vertical cutting device.

Claims 7-14 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Moriarty et al 2005/0126826

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Moriarty discloses an apparatus to install a casing string 411 into a borehole 407 while the borehole is being driven. A casing latch 412 is installed at a distal end of the casing string. The latch having a pass-through diameter smaller than the casing internal diameter. The casing latch connects to a vertical drilling assembly 430. The vertical drilling assembly includes a mud motor 417, a first cutting device 405 and a second cutting device 423. Mud motor 417 rotates cutting device 405 in a direction opposite the direction of rotation of the casing. Second cutter device 413 rotates with the casing. The vertical drilling assembly being configured to be retrieved through the

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pass-through diameter of the casing latch. As to claim 8, cutter 413 is configured to drill at gauge diameter that is larger than the outside diameter of the casing string. As to claims 9 and 10, the cutter 413 is a collapsible underreamer. As to claims 11 and 12, the mud motor 417 is a positive displacement turbine driven motor. As to claims 13 and 14, a MWD tool 415 is provided. As to claim 18, the assembly includes a rotary steerable system 419 that can be a push-the-bit type as shown in Fig. 2C. A push-the-bit type includes a kick pad 226 to correct any deviations in the borehole detected by the MWD tool. As to claim 19, the bit 405 is a standard bit. As to claim 20, cutter 413 is located on a peripheral surface of the vertical drilling assembly. As to claim 21, the apparatus (described above) includes an actuator for pushing the pad 226 to bias the vertical drilling assembly in response to information from the MWD tool.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 7-24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of

compending Application No. 10/735323. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 10/735323 fully encompass the parent claims. As to claims 15-17 and 22-24, these claims are directed to common type measuring equipment. The exact measuring equipment provided in the MWD tool of 10/735323 would have been considered obvious to one of ordinary skill in the art since any known measuring equipment used in a MWD tool could be substituted for any other known measuring equipment.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 10 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (described above).

As to claim 10, while Chen does not specifically set forth that cutter 16 is collapsible, he does state in col. 3, lines 22-30 that the cutter 16 is retrieved through the internal diameter of the casing string, the bit will be a reamer, a bi-centered bit or any other cutting tool for cutting a borehole diameter greater than the OD of the casing string. Since collapsible reamers are well known, it would have been considered an obvious design choice to form the cutter 16 collapsible. As to claims 15-17, the exact types of measuring equipment used in the MWD tool would have been considered an obvious design choice since any known measuring tool could be used in the MWD tool.

Claims 15-17 and 22-24 are rejected under 35 U.S.C. 103(a) as being obvious over Moriarty et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2). The exact types of measuring equipment used in the MWD tool would have been considered an obvious design choice since any known measuring tool could be used in the MWD tool.


***Allowable Subject Matter***

Claims 1-6 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William P Neuder  
Primary Examiner  
Art Unit 3672

W.P.N.